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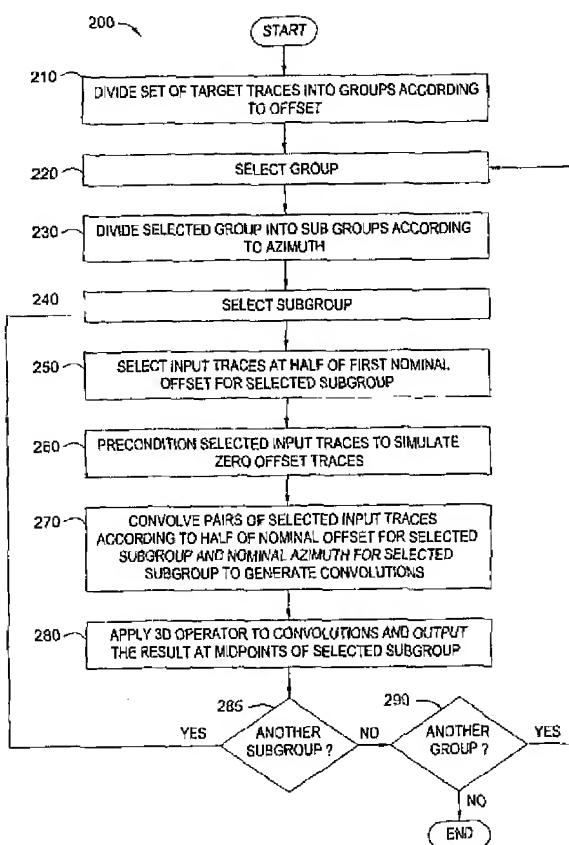
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(54) Title: FAST 3-D SURFACE MULTIPLE PREDICTION



(57) Abstract: A method and apparatus for predicting a plurality of surface multiples for a plurality of traces in a record of seismic data. In one embodiment, the method includes providing a plurality of target traces at a nominal offset and a nominal azimuth; selecting a plurality of pairs of input traces, wherein the midpoints of the input traces in each pair are separated by half the nominal offset and the azimuth of a line connecting the midpoints of the input traces in each pair is equal to the nominal azimuth; convolving the selected pairs of input traces to generate a plurality of convolutions; and applying a three dimensional operator to the convolutions.

WO 2005/103765 A1



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